

The Power and Speed of Vision



KEY BENEFITS

- » 8,192 pixels, 5µm x 5µm or 10µm x 10µm pixel size
- » Available in monochrome (four active CMOS lines) or color (two active CMOS lines)
- » CMOS lines arranged in dual line (filter) configuration
- » Compatible with standard F-mount lenses, T2 M42 and also M95 for the 8k x 10µm
- » Line rate up to 100kHz in monochrome model and 50kHz in color model
- » CameraLink and CoaXPress interfaces
- » Power consumption below 10W

APPLICATIONS

- » Printing inspection
- » High resolution document scanning
- » Flat panel display inspection
- » Printed circuit board inspection
- » High quality raw material
- » Surface inspection
- » High quality food and pharmaceutical inspection
- » Industrial inspection

Teledyne e2v's next generation of line scan cameras are setting new, high standards for line rate and image quality. Due to **Teledyne e2v's** recently developed multi-line CMOS technology, the cameras provide high line rates and combine high response with extremely low noise levels. This delivers a high signal to noise ratio even when short integration times are required or when illumination is limited. The 5µm pixel size is arranged in four or two active lines in the monochrome model and two active lines in the color model. The dual line filter configuration allows the camera to be operated in several modes.



SENSOR CHARACTERISTICS

	Mono	Color
Resolution – pixels	8,192	
Pixel size – square μm	5/10	
Max line rate – kHz	100	50
Number of active lines	4	2
Camera interface	CameraLink/CoaXPress	

FUNCTIONALITIES

Maximum analog gain – dB	12	
Maximum digital gain – dB	20	8
White balance gain – dB	-	8
Offset correction	-256 to +256	
Trigger mode	Time (free run) and triggered modes (Ext Trig, Ext ITC)	
White balance	-	yes
Flat field correction	yes	
Scan direction	yes	

TYPICAL PERFORMANCES

Bit depth – bits	8/12	8
Spectral range – nm	300 – 1,100	
Dynamic range – dB	73	65
PRNU – %	<1	
Non linearity – %	<1	

ELiiXA+ 16k can also be operated in binning mode to achieve 8k resolution.

ELiiXA+ 8k can also be operated in binning mode to achieve 4k resolution.

MECHANICAL AND ELECTRICAL INTERFACE

	Mono	Color
Size – W x H x L mm	60 x 125 x 35	
Lens mount	F, T2, M42 x 1	
Sensor alignment – μm	± 100	
Sensor flatness – μm	50	
Power supply – V	Single 12 to 24	
Power consumption – W	<7	<10

CONNECTORS

Inputs	2 x SDR CameraLink
Power, control & data	Hirose 6 pins

GENERAL FEATURES

Operating temperature – $^{\circ}\text{C}$	0 to 55
Storage temperature – $^{\circ}\text{C}$	-40 to 70
Regulatory	CE, FCC and RoHS compliant

PART NUMBER	NO. OF LINES	PIXEL SIZE ($\mu\text{m} \times \mu\text{m}$)	MONO/COLOR	INTER-FACE	MAX LINE RATE
EV71YC2MCL8005-BA0	2	5 x 5	Mono	CameraLink	40
EV71YC2MCL8005-BA1	2	5 x 5	Mono	CameraLink	100
EV71YC4MCL8005-BH0	4	5 x 5	Mono HDR	CameraLink	40
EV71YC4MCL8005-BH1	4	5 x 5	Mono HDR	CameraLink	100
EV71YC4CCL8005-BA0	2	5 x 5	Color	CameraLink	50
EV71YC4CCL8005-BA1	2	5 x 5	Color	CameraLink	100
EV71YC4CCL8005-BH0	2	5 x 5	Color HDR	CameraLink	50
EV71YC4MCL1605-BA1	4	5 x 5	Mono	CameraLink	50
EV71YC4MCP1605-BA1	4	5 x 5	Mono	CoaXPress	140
EV71YC4MCP1605-BH0	4	5 x 5	Mono	CoaXPress	100
EV71YC4CCP1605-BA0	2	5 x 5	Color	CoaXPress	45

